

Appl. No. 09/438,431
Arndt, Dated April 21, 2003
Reply to Office action of September 12, 2003
Attorney Docket No. P12817-US1
EUS/J/P/04-3089

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of selectively accessing an Internet Protocol (IP) network, comprising the steps of:

determining whether an end device has access to said IP network, wherein said end device is coupled to an indirect interface capable of communicating with one or more access network-terminating devices, each said access network-terminating device being coupled to an associated access network and each said access network being communicably coupled with said IP network;

confirming the availability of said one or more access network-terminating devices;

determining the access capability of each of said one or more access network-terminating devices, said access capability comprising one or more predetermined factors;

comparing the determined access capability for each of said one or more access network-terminating devices to said access network with a preferred access capability being associated with said end device; and

said end device selecting at least one of said one or more access network-terminating devices to provide an optimum connection to said end device and said access network, wherein the access capability of said selected access network-terminating device is ranked highest according to said one or more predetermined factors.

2 (Previously Presented) The method of claim 1, further comprising the step of configuring said end device according to the access capability of the selected at least one of said one or more access network-terminating devices.

3. (Previously Presented) The method of claim 1, wherein said predetermined factors of said one or more access network-terminating devices

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comprise cost of access, coverage area, bandwidth delay, priority level and Quality of Service (QoS).

4. (Cancelled)

5. (Previously Presented) The method of claim 1, further comprising the steps of:

polling said indirect interface to detect if one or more new access network-terminating devices are available to said end device;

determining an access capability for each of the detected one or more new access network-terminating devices; and

comparing said access capability for each of the detected one or more new access network-terminating devices with said preferred access capability of said end device to determine whether said detected one or more new access network-terminating devices can improve the current connection of said end device to said network.

6. (Currently Amended) The method of claim 5, further comprising the steps of:

selecting one of the one or more new access network-terminating devices based [[base]] on the comparison; and

configuring said end device according to the access capability of the selected one of the one or more new access network-terminating devices.

7. (Currently Amended) A system for providing selective access to an Internet Protocol (IP) network comprising:

an end device capable of selecting a connecting device coupled to an access network;

at least one access network-terminating device for connecting said end device to [[an]] said access network, each said at least one access network-terminating device

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being coupled to an associated access network and each said associated access network being communicably coupled with said IP network;

an indirect interface coupled to said end device for connecting said end device to said at least one access network-terminating device; and

a processor incorporated in said end device for:

detecting said at least one access network-terminating device;

collecting an access capability of said at least one access network-terminating device to said IP network, said access capability comprising one or more predetermined factors;

comparing said predetermined factors of said access capability of said at least one access network-terminating device to preferred predetermined factors associated with said end device; and

selecting at least one preferred access network-terminating device according to said comparison.

8. (Previously Presented) The system of claim 7, further comprising means for configuring said end device to match said access capability of said preferred access network-terminating device.

9. (Previously Presented) The system of claim 7, wherein said predetermined factors include cost of access, coverage area, and Quality of service (QoS).

10. (Currently Amended) The system of claim 7, wherein said preferred predetermined factors include one or more of [:] cost of access, coverage area, and QoS.

11. (Previously Presented) The system of claim 8, further comprising:

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means for polling to detect if one or more new access network-terminating devices are available to said end device;

means for determining an access capability for each of the one or more new access network-terminating devices if detected; and

means for comparing said access capability for each of the one or more detected new access network-terminating devices with said preferred access capability of said end device to determine whether said detected new access network-terminating devices can improve the current connection to said network.

12. (Previously Presented) The system of claim 11, further comprising means for configuring the end device according to the access capability of the selected one of the one or more new access network-terminating devices.

13. (Previously Presented) The system of claim 12, wherein said end device is a cellular telephone.

14. (Currently Amended) The system of claim 13, wherein said cellular telephone includes, as a direct interface, means for communicating over a cellular air interface and includes, as said indirect interface, means for communicating over a Bluetooth air interface, wherein said Bluetooth air interface is associated with each of said access network terminating devices.

15. (Currently Amended) An end device for connecting to an Internet Protocol (IP) network, comprising:

means for storing access capability for said end device;

means for communicating with at least one access network-terminating device over an indirect interface, each said access network-terminating device being communicably coupled to an associated access network and each said access network being communicably coupled with said IP network;

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means for comparing said stored access capability to an access capability of each of said at least one access network-terminating devices; and

said end device having means for selecting a preferred access network-terminating device according to said comparison to provide an optimum connection to said access network, wherein said access capability comprises predetermined factors and said preferred network terminating device is determined according to said predetermined factors:

16. (Currently Amended) The end device of claim 15, wherein said indirect interface is a Bluetooth interface and is associated with said access network terminating devices.

17. (Previously Presented) The end device of claim 15, wherein said access network-terminating devices provide a communication link with the Internet.

18. (Previously Presented) The end device of claim 15, further comprising means for communicating over a direct interface.

19. (Original) The end device of claim 18, wherein said end device can communicate simultaneously over said direct interface and said indirect interface.

20. (Original) The end device of claim 18, wherein said direct interface is a cellular interface.

21. (Currently Amended) A method for selectively connecting an end device to an Internet Protocol (IP) network comprising the steps of:

identifying at least one access network-terminating device for connecting said end device to an access network coupled to said IP network;

transferring access capability information between said at least one access network-terminating device and said end device;

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comparing said transferred access capability information with stored user preferred access capability information;

said end device selecting one of said at least one access network-terminating devices based on a result of said comparing step; and

connecting to said access network using said selected access network-terminating device.

22. (Previously Presented) The method of claim 21, further comprising the step of continuing, after said connecting step, to identify access network-terminating devices available to said end device.

23. (Previously Presented) The method of claim 22, further comprising the step of: determining if said access capability information associated with a newly identified access network-terminating device provides a better match with said stored user preferred access capability information than said selected access network-terminating device.

24. (Previously Presented) The method of claim 23 further comprising the step of selectively changing from said selected access network-terminating device to said newly identified network terminating device based on a result of said determining step.

25. (Previously Presented) The method of claim 21, wherein said step of transferring further comprises the step of offering, from said at least one access network-terminating device, a foreign agent to said end device.